DOCUMENT RESUME

ED 226 351 CS 207 346

AUTHOR Fearn, Leif
TITLE Measuring Mechanical Control in Writing Samples.
PUB DATE Jul 82
NOTE 9p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Capitalization (Alphabetic); Elementary Education; Elementary School Teachers; *English Teacher Education; Error Analysis (Language); *Grammar; *Holistic Evaluation; Inservice Teacher Education; Punctuation; *Sentence Structure; Teacher Response; *Writing Evaluation; *Writing Research
IDENTIFIERS *Interrater Reliability

ABSTRACT

One elementary school writing sample written to cue under a 5-minute time limit was presented to 33 teachers who had been trained to use a holistic and a primary trait writing sample assessment system. Working on the assumption that teachers would recognize mechanical errors on sight, training in mechanical control was limited to orientation regarding the mechanical targets to be counted: capitalization, punctuation, single word errors, and structure. Error tallies indicated that while 70% of the teacher/scorers tallied within central tendency, the other 30% to 40% tallied beyond central tendency, indicating that they did not recognize errors. No error count was agreeable to all readers. Using single word errors as an example, eight teachers failed to recognize some combination of missing periods, missing commas, missing apostrophes, and inappropriate comma use. If teaching writing well has anything to do with helping students master the basic mechanical conventions, the teachers' ability to use those conventions in their own writing is necessary, but insufficient. Clearly, there must be a parsimonious conception of high-utility mechnical conventions in preservice and inservice teacher education. Further, these conventions must be taught directly, practiced in writing, and recognized as instances and noninstances in a variety of actual student writing samples. (HOD)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED226351

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

# MEASURING MECHANICAL CONTROL IN WRITING SAMPLES

Leif Fearn

Department of Special Education

San Diego State University

San Diego, California 92182

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Leif Fearn

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

July 1982

CS207346

## MEASURING MECHANICAL CONTROL IN WRITING SAMPLES

Mechanical integrity is an element in most writing sample assessment systems, whether formal or informal. Criteria in holistic and primary trait systems routinely include mechanical elements, and teachers routinely score or grade with systems that include mechanical elements. Assessment of mechanical integrity is perceived to be the most "objective" of the various writing sample measures, on the assumption, perhaps, that teachers recognize mechanical errors when they see them.

The writer took that assumption into an investigation of the interrater consistency of a selected measure of writing samples. One elementary school writing sample, written to cue under a five-minute time limit, was presented to thirty-three teachers who had been trained to use a holistic and a primary trait writing sample assessment system. On the assumption that teachers would recognize mechanical errors on sight, training in mechanical control was limited to orientation regarding the mechanical targets to be counted.

Those fell into four categories:*

1. Capitalization,
2. Punctuation,
3. Single Word Errors (spelling, tense disagreement, omissions, inappropriate word selection, and so forth), and
4. Structure (run-on and fragment strings).

Without orientation to what those errors represent in print, that is, the rules or conventions associated with capitalization, punctuation, and syntax, the teacher-scorers were directed to count errors in each category. Their counts were taken from the sample that follows which is, though typewritten for publication, reproduced precisely as originally written by an elementary school learner in response to the cue: "Describe a room in your home."

> It is all yellow, even the bedspread is yellow. It is not that big or that small, it is just right, or at least I think so. Of course, it is my room. It is in the middle of a hall, it is between my mom and dads room and my brother's room. In it there is a double bed, a desk, and two dresser. One of my dresser I have a baby hamster, and about six or seven little goldfish and guppies I have quite a lot of stuffed animals on that same dresser. I have a Afircan**

*Writing Kabyn: Assessment, Kabyn Books, San Diego, 1981.

**Under conditions of a time limit, this final string is not counted as a fragment because learners were directed to stop precisely on signal.

The group's mechanical control scoring performance is reflected in Table 1.

Table 1: Descriptions of Mechanical Error Tallies

| | Capitalization | Punctuation | Single Word Errors | Structure |
|---|---|---|---|---|
| $\bar{X}$ | 1.6 | 3.7 | 4.7 | 1.8 |
| Median | 2.0 | 4.0 | 5.0 | 2.0 |
| Range | 0-5 | 0-9 | 0-9 | 0-4 |

Scorers counted an average of 1.6 capitalization errors for a median of 2 on a range of 0-5. The larger interrater consistency question is not at issue here. What is at issue is that nearly three dozen practicing teachers read through the same writing sample and found anywhere from no punctuation errors to nine punctuation errors. And counting punctuation errors is perceived to be an objective measure in writing sample assessment.

The frequency distribution in Table 2 helps place the ranges in a perspective that does not imply mechanical impotence among all of the teacher-scorers.

Table 2: Frequency of Mechanical Error Tallies

| Capitalization | | Punctuation | | Single Word Errors | | Structure | |
|---|---|---|---|---|---|---|---|
| Score | N | Score | N | Score | N | Score | N |
| 5 | 1 | 9 | 1 | 9 | | 4 | 2 |
| 4 | 0 | 8 | 0 | 8 | | 3 | 7 |
| 3 | 5 | 7 | 2 | 7 | | 2 | 12 |
| 2 | 11 | 6 | 1 | 6 | | 1 | 6 |
| 1 | 12 | 5 | 6 | 5 | | 0 | 6 |
| 0 | 4 | 4 | 8 | 4 | | | |
| | | 3 | 7 | 3 | | | |
| | | 2 | 2 | 2 | | | |
| | | 1 | 5 | 1 | | | |
| | | 0 | 1 | 0 | | | |

Clearly, the extreme tallies do not reflect the majority of teacher-scorers. Central tendency in capitalization is slightly less than 2, 70% of the teacher-scorers are in that range, and such a high in-range percentage is characteristic of the other three mechanical targets. Nevertheless, thirty to forty percent of the teacher-scorers tallied beyond central tendency.

Leading to the conclusion that teacher scorers who tallied beyond central tendency did not recognize errors is the evidence that, with the exception of the single word category, the weight of deviance is low rather than high. Most deviating teacher-scorers were below central tendency.

None of this discussion has addressed the actual errors in the sample, of which there are several, categorized heavily on the basis of criteria brought to bear by the reader. No error count will be agreeable to all readers, but the system on which this investigation was based produced a total of fourteen: one in capitalization, seven in punctuation, five in single word errors, and one in structure. Using single word errors as an example, four teacher-scorers did not notice some combination of "dressers" misspelled twice and "African" once. Eight teacher-scorers failed to recognize some combination of missing periods, missing commas, missing apostrophe, and inappropriate comma use. Six teacher-scorers did not recognize a run-on sentence string, and someone found five capitalization errors in a sample that, as written, couldn't have more than about a dozen capital letters, of which eleven are explicitly apparent.

The teacher-scorers under scrutiny in this investigation were literate; they wrote widely and well, with mechanically accurate language on initial draft, over an intense three day period. Their ability to recognize mechanical error was not related to their ability to write with mechanical accuracy. If teaching writing well has anything to do with helping learners master the basic mechanical conventions, teachers' ability to use those conventions in their own writing is necessary, but insufficient.

Teachers must know mechanical conventions explicitly, and they must be able to recognize both instances and

noninstances in writing other than their own. Being able to write mechanically accurate language does not suggest the ability to teach learners how to write mechanically accurate language.

The preservice and inservice implications of this investigation are clear. First, there must be a parsimonious conception of high-utility mechanical conventions. At this writing, only one exists, and that one does not enjoy wide recognition. Teachers are teaching a disorganized array of capitalization, punctuation, and syntactic rules under circumstances of varying terminology and ambiguous application. Learners are not learning them, and teachers do not recognize them on sight in writing.

Further, those high-utility conventions must be taught directly, practiced in writing, and recognized as instances and noninstances in a variety of actual learner writing samples. Teacher education cannot be based on the assumption that teachers know mechanical conventions consciously, and it cannot confuse mechanical competency with the ability to complete exercise sheets in the skills center. Each convention must be framed as a writing activity and as a proofreading activity, and teachers should be able to frame learning activities in both writing and proofreading based upon, for instance, a multiple clause sentence that demands a certain form of punctuation. Mechanical conventions, if important at all, and no responsible writer dismisses their importance in writing, must be conscious knowns for people

who intend to teach them.

Finally, personnel in staff development, and especially preservice teacher education, must rethink the assumption that written literacy, demonstrated on the university writing competency screen, has something to do with the literacy necessary to teach writing. This investigation of mechanical awareness appears to expose that assumption to serious reservation.